Claims

[c1] 1. A stylus retaining and releasing mechanism suitable for use within a housing that can receive a stylus having a retaining slot formed thereon, wherein the housing has a cavity into which the stylus can be slidably inserted, the stylus retaining and releasing mechanism comprising:
a stylus-releasing device, wherein the stylus-releasing device is arranged at a location of the housing that terminates the cavity so that, in a first stage of operation, the stylus-releasing device can store resilient force in a stable configuration after the stylus being inserted in the cavity presses on the stylus-releasing device to engage into the first stable configuration, and in a second stage of operation, the stylus-releasing device can exert a resilient force on the stylus being held immobile in the cavity to eject the stylus out of the cavity after a short pressing action is applied on the inserted stylus to disengage the stylus-releasing device from the stable configuration; and
a retainer, wherein the retainer is arranged adjacent to the cavity so that the retainer can resiliently deviate when contacted with the stylus being inserted in the cavity, the retainer further includes a protruding clamping member that inserts in the retaining slot of the stylus to hold and immobilize the stylus in the cavity once the inserted stylus engages the stylus-releasing device in the stable configuration.

[c2] 2. The mechanism of claim 1, wherein the retainer is formed with the housing in a single body.

[c3] 3. The mechanism of claim 1, further including an impeding member that contacts with the stylus in the cavity to moderate the ejection of the stylus.

[c4] 4. The mechanism of claim 3, wherein the impeding member includes a material with relatively high friction coefficient.

[c5] 5. The mechanism of claim 4, wherein the impeding member includes foam polymer material.

[c6] 6. The mechanism of claim 1, wherein the stylus-releasing device is fixedly attached on the housing by means of a resilient plate, the resilient plate is

fixedly attached to the stylus-releasing device and further terminates into a plurality of bent claws that fixedly insert in the housing.

[c7] 7. An electronic equipment having a touch panel display screen, comprising:
a stylus, wherein the stylus serves as pointing device, and has a retaining slot thereon;
a housing, wherein the housing includes a cavity in which the stylus can be slidably inserted when not used;
a stylus-releasing device, wherein the stylus-releasing device is arranged at a location of the housing that terminates the cavity so that, in a first stage of operation, the stylus-releasing device can store resilient force in a stable configuration after the stylus being inserted in the cavity presses on the stylus-releasing device to engage into the first stable configuration, and in a second stage of operation, the stylus-releasing device can exert a resilient force on the stylus being held immobile in the cavity to eject the stylus out of the cavity after a short pressing action is applied on the inserted stylus to disengage the stylus-releasing device from the stable configuration; and
a retainer, wherein the retainer is arranged adjacent to the cavity so that the retainer can resiliently deviate when contacted with the stylus being inserted in the cavity, the retainer further includes a protruding clamping member that inserts in the retaining slot of the stylus to hold and immobilize the stylus in the cavity once the inserted stylus engages the stylus-releasing device in the stable configuration.

[c8] 8. The electronic equipment of claim 7, wherein the retainer is formed with the housing in a single body.

[c9] 9. The mechanism of claim 7, further including an impeding member that contacts with the stylus in the cavity to moderate the ejection of the stylus.

[c10] 10. The mechanism of claim 9, wherein the impeding member includes a material with relatively high friction coefficient.

[c11] 11. The mechanism of claim 10, wherein the impeding member includes foam polymer material.

[c12] 12. The mechanism of claim 1, wherein the stylus-releasing device is fixedly attached on the housing by means of a resilient plate, the resilient plate is fixedly attached to the stylus-releasing device and further terminates into a plurality of bent claws that fixedly insert in the housing.